

REMARKS

The Official Action mailed December 23, 2009, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to April 23, 2010. Also, filed concurrently herewith is a *Request for Continued Examination*. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on July 6, 2006.

Claims 10-13, 25, 26 and 29-38 were pending in the present application prior to the above amendment. Claim 10 has been amended to better recite the features of the present invention; claims 12, 13, 25, 26 and 34-38 have been canceled without prejudice or disclaimer; and new claims 49-54 have been added to recite additional protection to which the Applicant is entitled. Accordingly, claims 10, 11, 29-33 and 49-54 are now pending in the present application, of which claims 10 and 50 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 13 of the Official Action rejects claims 10-13, 25, 26 and 29-38 as obvious based on the combination of U.S. Publication No. 2006/0020136 to Hwang, U.S. Patent No. 6,660,410 to Hosokawa and U.S. Publication No. 2003/0175553 to Thompson. In order to overcome this rejection, verified English translations of priority applications JP 2004-381155 and JP 2005-085020, filed on December 28, 2004 and March 23, 2005, respectively, are filed concurrently herewith. Since Hwang has a U.S. filing date of July 13, 2005, which is later than the filing date of JP '155 and JP '020, the Applicant respectfully submits that the rejections under § 103 should be overcome. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103 are in order and respectfully requested.

Paragraph 27 of the Official Action rejects claims 10, 11, 29, 30, 32 and 33 as obvious based on the combination of U.S. Publication No. 2004/0151944 to Onikubo,

Hosokawa and Thompson. Paragraph 35 of the Official Action rejects claim 31 as obvious based on the combination of Onikubo, Hosokawa, Thompson and U.S. Publication No. 2001/0046612 to Lee. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2144.04, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reason, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some reason to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of independent claim 10, as amended. Specifically, claim 10 already recites general formula (3) (which includes Ar²¹), and claim 10 has been amended to recite that Ar²¹ represents a substituted or unsubstituted phenyl group, a substituted or unsubstituted naphthyl group, or a heteroaryl group having 5 to 9 carbon atoms. These features are supported in the present specification, for example, by a variety of the illustrated compounds (9) to (71), which show the unsubstituted and substituted phenyl group and naphthyl group. For the reasons provided below, Onikubo, Hosokawa,

Thompson and Lee, either alone or in combination, do not teach or suggest the above-referenced features of the present invention.

The Official Action relies on Onikubo to allegedly teach a carbazole derivative (compound A24) (page 8, Paper No. 20091209). However, the Applicant respectfully submits that Onikubo strictly limits the structure of the compound to have a perylene moiety in order to obtain strong luminescence and high thermal stability (see, paragraph [0049]), which indicates that any hypothetical replacement of the perylene moiety with a substituent other than a perylene moiety would appear to render Onikubo unsatisfactory for its intended purpose and change the principle of operation of Onikubo, which are indicia of non-obviousness (see MPEP § 2143.01, Parts V and VI).

The Applicant respectfully submits that Hosokawa, which is relied upon to allegedly teach the features outlined in paragraph 30 (Id.), Thompson, which is relied upon to allegedly teach the features outlined in paragraph 31 (page 9, Id.), and Lee, which is relied upon to allegedly teach the features outlined in paragraph 37 (page 10, Id.), do not cure the above-referenced deficiencies in Onikubo. Namely, Hosokawa, Thompson and Lee do not explain why one of ordinary skill in the art at the time of the present invention would have had a reason to modify Onikubo in a manner that would render Onikubo unsatisfactory for its intended purpose and change the principle of operation of Onikubo. Therefore, the Applicant respectfully submits that Onikubo, Hosokawa, Thompson and Lee, either alone or in combination, do not teach or suggest general formula (3) (which includes Ar^{21}), where Ar^{21} represents a substituted or unsubstituted phenyl group, a substituted or unsubstituted naphthyl group, or a heteroaryl group having 5 to 9 carbon atoms.

Since Onikubo, Hosokawa, Thompson and Lee do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.


Paragraph 39 of the Official Action rejects claims 12, 13, 25, 26, 34, 35, 37 and 38 as obvious based on the combination of Thomas, "Light-Emitting Carbazole Derivatives: Potential Electroluminescent Materials," Journal of the American Chemical Society, 2001, Volume 123, Pages 9404-9411, Hosokawa and Thompson. Paragraph 50 of the Official Action rejects claim 36 as obvious based on the combination of Thomas, Hosokawa, Thompson and Lee. In response, claims 12, 13, 25, 26 and 34-38 have been canceled without prejudice or disclaimer; therefore, the above-referenced rejections are now moot.

New claims 49-54 have been added to recite additional protection to which the Applicant is entitled. The features of claim 49 are supported in the present specification, for example, by paragraph [0097] of the pre-grant publication of the present application, i.e. U.S. Publication No. 2008/0254318. New claims 50-54 are supported in the present specification, for example, by paragraph [0035]. For the reasons stated above and already of record, the Applicant respectfully submits that new claims 49-54 are in condition for allowance.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.

Respectfully submitted,



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